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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,632

05/20/2005

Bo Lindell

9342-50

7697

54414

7590

05/16/2008

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EXAMINER

HUANG, DAVID S

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

05/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,632	Applicant(s) LINDELL ET AL.	
	Examiner DAVID HUANG	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/20/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Europe on 11/21/2002. It is noted, however, that applicant has not filed a certified copy of the European application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

1. The references listed in the Information Disclosure Statement(s) filed on 5/20/2005 have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

Drawings

2. The drawings are objected to because there are no labels for blocks 10-35 in Figures 3 and 5. These blocks need to have descriptive labels under 37 CFR 1.84(n) and 1.84(o). For example, block 20 of Figs. 3 and 5 may be labeled as "RX" or "Receiver". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be

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labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. **Claims 1-18** are objected to because of the following informalities:

In claim 1, lines 8 and 12, there are two separate recitations of "a new control value." It is unclear whether these recitations refer to the same or different limitations. For examination on the merits, the claim will be interpreted such that the recitations refer to the same entity (i.e. the second recitation on line 12 will read as "the new control value").

Claim 1 also recites the limitation "the last used control value" in line 13. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether this limitation refers to "a previous control value" recited on lines 10-11, or to something else. For examination on the merits, the claim will be interpreted such that "a previous control value" will be read as "any previously used control".

Claims 11 and 12 are similarly constructed, and are likewise objected.

Claim 4, line 4, reads "a second control unit (30) arranged to..." whereas the parallel construction previously used for "a first control unit" has been amended to remove the reference number and change "arranged" to "configured". The claim language should be consistent in its construction. Appropriate correction is required.

Claims 2-10 and 13-18 are dependent on objected claims 1 and 12 and contain the same defects.

Allowable Subject Matter

4. Claims 1-18 are objected to for the reasons indicated above, but would be allowable if rewritten in to correct the issues raised by objections.

5. The following is a statement of reasons for the indication of allowable subject matter:

The present invention comprises a receiving unit to receive a reference frequency, a frequency source, and at least one control unit configured to supply a new control value to the frequency source, the value being determined by the frequency source frequency and the reference frequency, and to calculate a rate of change value at least based on the new and a previous control value. The closest prior art, Otsuka et al. (US 5,818,302 - cited in IDS), discloses a similar system with AFC oscillation circuit 2, VCO 22, and control circuit 20 (Fig. 2) which determines a change per unit time in the digital phase difference signal. However, Otsuka et al. fail to disclose if there is a communication with the reference generator, the control unit is configured to calculate a new control value based on the rate of change value and the last used control value, and to supply the new control value to the frequency source if there is no communication with the reference generator. These limitations distinguish independent claims 1, 11, and 12 over the prior art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Steierman (US 4,972,422).

Scordo (US 4,633,193) .

Johnson et al. (US 4,849,993).

Tsuchiya et al. (US 6,339,625).

Yoshihara et al. (US 4,691,377).

7. This application is in condition for allowance except for the following formal matters:

Objections to the drawings and claims 1-18.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID HUANG whose telephone number is (571)270-1798. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571) 272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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May 12, 2008
/David Huang/
Examiner, Art Unit 2611
/Shuwang Liu/
Supervisory Patent Examiner, Art Unit 2611